



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,456	10/29/2003	Kaname Joushita	K06-163174M/AT	4566

21254 7590 04/27/2005

MCGINN & GIBB, PLLC
8321 OLD COURTHOUSE ROAD
SUITE 200
VIENNA, VA 22182-3817

EXAMINER

LUM VANNUCCI, LEE SIN YEE

ART UNIT	PAPER NUMBER
----------	--------------

3611

DATE MAILED: 04/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/695,456

Applicant(s)

JOUSHITA, KANAME

Examiner

Lee Lum

Art Unit

3611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) all is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. An Amendment was filed 2/9/05 in which Claims 8-16 were also added.
2. The drawings are objected to because in relevant figures, the "elastic member 45" is not correctly depicted with alternately-heavy cross-hatching. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended."

If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency.

Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Art Unit: 3611

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In all independent Claims, "the elastic member" is unclear because insufficient structure is indicated to provide the limitations "first and second elastic moduli". Subsequent language in each respective claim, such as "corresponding to a/another case" is insufficient to provide the required structure. This issue renders the invention unclear.

In Claim 3, "a bifurcated structure defining a cavity" cannot be identified because the "elastic member" does not appear to have either "a bifurcated structure" or "a cavity", as best understood from the drawings.

In Claims 15 and 16, "clamped portions" (emphasis added) cannot be identified because the portions "radially extending from the body" (i.e., 45A, 57, 58) do not appear to have this characteristic, as best understood from the drawings.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- A. *As best understood*, **Claims 1-9, 14 and 15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Oka et al 6782771 in view of Hein 3313125.

Oka discloses an electric power steering device for transmitting rotation of electric motor 6 to a steering mechanism (fig 3) through small gear 71, and large gear 72, comprising

First member 81 disposed on rotary shaft 60 of the motor,

Second member 82 disposed at one end (fig 3) of the small gear,

Elastic member 83 interposed between the members.

As best understood, the reference does not disclose the elastic member as having moduli, while Hein shows a similar drive configuration with first and second members, including

Elastic member 12 having a first elastic modulus corresponding to a torsion angle between the members that is less than a threshold, and a second elastic modulus corresponding to a torsion angle more than, or equal to, the threshold, the first modulus being less than the second

– as provided in c3, ln 22-54,

Wherein first member 10, and second member 11, comprise protrusions/clamping faces 15 for meshing in a torque-transmitting manner, while clamping the elastic member in between, and,

at least of the faces comprise projections 17 for establishing the first modulus by compressing the elastic member locally,
and,

Wherein the first and second members have a plurality of projections 19,

The elastic member has a bifurcated structure, *as best understood*, and cavity 30, the cavity being substantially collapsed when the torsion angle is equal to/larger than the predetermined angle, and also including

Body portion 25,

Plurality of plate-shaped clamped portions 26. *as best understood*.

B. *As best understood*, **Claim 16** is rejected under 35 U.S.C. 103(a) as being unpatentable over Oka in view of Hein, and in further view of Polakowski 6123620.

The previous references do not disclose the plate-shaped portions of the elastic body as including a projection, while Polakowski shows this feature 48, extending from the plate-shaped portions 42, off body 40, of the elastic member (40).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to include this element, as shown in Polaskowski, an another means by which torque may be differentiated upon application of force. Prior art shows various functionally-equivalent features which facilitate this objective, and a particular type is application-dependent.

5. As best understood, **Claims 10-13** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, and any 112 issues resolved.

Prior art does not disclose the device described above further comprising, *inter alia*, the elastic member as including a foam portion having the first modulus.

6. The prior art made of record, and not relied upon, is considered pertinent to the disclosure: McGuire 4968286, Kronert et al 4384858.

7. RESPONSE TO REMARKS

Upon reconsideration, Examiner has provided new rejections, including 112 issues. Oka in view of Hein, etc., obviates the recited elements, *as best understood*.

8. Communication with USPTO/Examiner

Any inquiry concerning this communication, or others, should be directed to Ms. Lum at 571 2726649, M-F, 9-5. If attempts to reach the examiner are unsuccessful, her supervisor, Ms. Lesley Morris is at 571 2726651. Our fax number is 703 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for unpublished applications: private PAIR only, for published applications: private or public PAIR. For more information re PAIR: <http://pair-direct.uspto.gov>. Questions re private PAIR: contact the Electronic Business Center (EBC) at 866 217-9197.

Ms. Lee S. Lum
Examiner
4/25/05

